On Traumatic Gangrene

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A unselfish Thesis, written with care; and deserving of commendation.
In systematic works on Surgery, gangrene has been divided in various ways; among others, into local and constitutional, identifying these terms with the acute and chronic.

These distinctions point to the more immediate cause of the mischief, and do not imply that the one is wholly a local, the other constitutional disorder.

In what follows, we shall discuss the subject of local gangrene and the constitutional condition to be treated of, as that we have just mentioned as a subdivision of the general subject, into symptomatic condition the invariable accomplishment of the acute form of the Malady. The term Acute has been applied to it, not as pointing out the action of itself to be acute, as we speak in general of acute diseases, but as indicating the antecedent action to which, that character may also apply, to the rapidity of its extension. From this marked feature of its progress, it has received another designation "spreading gangrene," the operation being made by excellence, rather than by fear of too great. Other forms of gangrene, in fact, all spread, but none do so quickly or violently as this.
"Gunpene, Gunpeneous inflammation, or inflammation it deserves a
title, is terminable in Sphacelia (that these terms are synonyms).
Throp's System of Inflammation p. 578.

"I do not employ the term "Mortification," because it is not technically
explicit; it has been vaguely, indiscriminately used. For shall I use
the term "Sphacelia." Because Gunpene is a sufficient synonym of
the term Gunpeneous inflammation be accepted. If Gunpene
part is never restored, by the action of Gunpeneous inflammation
the Gunpene may be circumcised."

Travis on Inflammation p. 208.

"In The Principles of Surgery p. 29."
Thus we may have the action creeping on for weeks; now staged, again advancing, and all this in a patient already weak & exhausted; on the other hand a man who but yesterday was half healthy is struck down; the morbid action spreads so rapidly that within it is a matter of hours, rather than days or weeks.

The term Totemic is also employed to designate this form of the disease. If strictly applied to these forms only, it follows rapidly, its use might be open to serious misconception, but it becomes an expedient & convenient division when employed as the converse of the Idiopathic Form.

But to proceed - Gangrene may be employed either as a generic term, or may be restricted to a part of the process. In the first of these applications, it designates a series of changes occurring in a part of a living organism, its termination in its death, and removal from the body. In the other more restricted use, it is applied to a part in process of dying. The Part thus affected is said to be gangrenous. Mortification is a term applied to the whole process. Gangrene in theme in employed only in its more restricted sense.

The division of Gangrene into the following heads will greatly facilitate the consideration of the phenomena.

1st. The Symptoms & precede the accomplishment of Gangrene.
2nd. Those exhibited by the Mortified Part.
3rd. Those of the System which attend the local changes.
Sometimes I'll be at one.
The symptoms are, preceded the accomplishment of gangrene.

Inflammatory gangrene is always preceded by inflammatory action, accompanied by the usual phenomena of its progress.

The inflammatory action may have from the first a highly acute character, accompanied with more or less constitutional irritation with concomitant local appearances. The inflammatory action is fiery; the heatitching; the pain is severe. Not only is the part acutely sensitive, but the whole limb, may the system sympathizing in the action is racked with suffering, frequently accompanied by clenching of the affected limb. The tension of the superficial is unusually great; injection follows, and the epidermis is elevated into blisters by the effusion of tense colored serum, constituting what have been called "Primary Phlegmene".

We have here evidence of almost a stagnation of the capillary circulation. With effusion, stasis have taken place; the space is in fact filled up with these inflammatory products, and from the tension the venous return is seriously impeded. The toxins initiated by the primary injury are now compressed, pro.

During fearful agony, and if the action have passed deeply, as it can scarcely fail to have done, the arterial supply of the part beyond is gradually becoming less and less, and is thinning, to the point where, having escaped the inflammatory action, they become from insufflation bluish; & ischemic. What follows is only what a priori we here expected. The part beyond the heat...
of injury, and the inflamed tissues become of a purplish hue. Other
The tension seems not to peel. The tissues feel boggy. The heat
partially subsides, indeed the part feel comparatively cold. The
local pain is almost gone. The parts are in a state of aphagia.
All vital attraction between the blood and the tissues is lost. The
absorption of secretion can go on, and any circulation. May
remains is wholly the effect of the cedera. The tissues in this
condition are not dead but it cannot continue long or they will
speculively become so. It is only in the earliest stages that any
just hopes of reformation can be entertained. There are limits
this action, beyond which if it pass, recovery becomes impossible.
Those limits it is not easy to define. But they form the boundary
between incipient gangrene and the condition of acute edema.
The Stasis of the circulation then begins, if absorption
may again proceed, but thoroughly be let up in some part.
Sometimes in all the tissues affected. The part in such cir-
stances will remain for some time, if may be permanently
weakened. The temporary weakness may easily be accounted
for, as repair, the weight almost may regeneration of tissue
is required, implying a large extent of new tissue or naturally
must take time to assume its full grown functions.
This speaks up a theoretical view of the phenomena as I have
in my described as preceding the accomplishment of gangrene.
Absorption cannot go on during such acute inflammation
And be may conjecture that the tissues Naturally and via
Healthy
healthful state visibly, undergoing decay are here just removed, but
remain with their vitality brought to a still lower state from the return
of the circulation. The blood is retained being of a venous character,
and unfit to go to the formation of new tissue. In this way we have in process of time a large proportion of old tisues.

New tisue is supplied in place. But a large quantity of exudation with
vicious excreta is exuded. Blooming up the diseased tissue, and
paving its nourishment from depreciated blood to trouble its
underlying cell formation. We have here the most favourable condi-
tion for destruction. Fresh lymph intimately mingled with
dying tisues, the first cut-off from any source hence to obtain
nourishment, the latter from any channel by & it may be
removed - a plentiful supply of moisture and an equalisable tem-
perature. These considerations will also elucidate the recovery
place, by the permanent breaking of the tissues, the operation
new tisues occupying the place of former ones, the action
natural in its character, are exactly the counterpart of what
had been removed. But when a tisue has been altered by disease,
the law still holds good: these diseased tisues are reproduced
in their diseased condition, this gradually 

These considerations are at times combined with the sequelae of inflammation of the true skin - whether
the action implicating the other tissue be of the same nature.
May be a matter of dispute, but the existence of this specific action seems to indicate a constitutional peculiarity, the nature of which we may consider with greater propriety, hereafter under the head of the predisposing causes of Traumatic Gangrene.

In this form or complication of the morbid action we more frequently meet with the primary Phlegmone already alluded to. Dr. It is particularly observed that Gangrene combined with Phlegmone often commences from slight local causes, and spreadeth with much greater rapidity, seldom terminating favourably either for the patient.

2d. The Symptoms Exhibited in the Inflamed Part.

It is here already seen how the Inflammation, action even then it exhibits, such alarming appearances as those described at may anticipate, and the part again to a great extent become its health condition. This however is unfortunately the exception. The Inflammation is not confined to the heat of injury; it spreads towards the trunk. It has produced the same alteration in the skin as at first. The concomitant hue is dusky, spreading irregularity, and as the tissue paper on it leaves behind a dull leathen tinge. The surface becomes of arogenous, blistered appearance streaked with yellow green. The skin is cold to the touch. The Parts first affected are more clearly: The cuticle easily separable from the Dermis. The dusky flatness forming secondary Phlegmone. The
Epewas pit in the slightest pressure: they crumble under the finger. The whole emits a gruesome stench. The silence of the end is terrifying. The burning away of spirit, pain, is intense. It is the blowing up of the dead texture from gas, beginning to be evolved. The intense pain is now gone; decisions may be made into the texture. Without the consciousness of the patient, for consciousness is gone; he is aware of nothing but an inexpressible sense of weight.

These changes are dependent on decomposition. It has been debated whether this takes place primarily in the dead bodies, or in the fluids in the decay. They were, almost said to float. Fluids may remain for long in any of the cavities of the body, and decomposition take place. In the peritoneum, for instance, we have fluid separated from the most yet fit for only by the coat of the bowel, and still in decomposition. The place partly the smallest particles of decomposing matter be added, decomposition rapidly increases. And we have seen that there is every probability that the first stage in the process of gas is the death of the renewed vitals. From then on, as it were as a ferment upon the fluids, matters of water be transformed. The black colour of the integument seems to depend upon the fluid. It is now become extraneous during decomposition, becoming altered. The blood beneath the peels also undergoes decomposition, and the bitter purple appearance seen upon the surface in the result of change, going on in the blood within the vein of the subterranean tinge. The gas evolved is partly anaerobic.
The inflammatory action may still go on space, or it may change, now advancing rapidly, now remaining stationary. Perchance a higher degree, being upon the boundary between the clear dying grey scene as though it were about to stay the plague, but this again is overstepped. These appearances reminiscences lines of demarcation are attempts of nature to limit the dying action, and are to be looked upon as very favourable signs of the system gaining strength to overcome the remaining cause.

At times the action is not proprae; symphonious inflammation may crop upon a whole limb. The patient suffers extreme agony. Suddenly, there is a subsidence of pain, the colour changes to pale flesh hue, sensibility is lost, the temperature sinks, and the limb looks as feels like clouded marble.

3. The Constitutional Symptoms which attend the Local Changes.

These are three kinds of Constitutional Symptoms to be most attended. They each distinct from each other; and each is a counterpart of the Concomitant Local Plethora.

a. Certain kinds of Constitutional Symptoms attending the primary injury, if it be of severe nature.

b. A distinct set of symptoms appearing along with inflammatory action.

c. The Constitutional Symptoms attendant upon the General
The first symptoms we may omit here, as we shall again have occasion to speak of the exciting causes of gangrene.

As inflammation commences we have evidence of nervous disorders in the mental anxiety, restlessness, present to a greater or less degree, accompanied with a sense of chilliness, numbness. It may proceed the length of vomiting. General perspiration follows. The skin is cold and clammy, and when this condition reaches its height, there is one or more vagors. The leathery close resistance of these last mentioned nervous symptoms may be taken as a criterion of the severity of the reaction. It is to denote the Pulse is sharp and rapid, but does not yield to compression. These indicative symptoms are difficult of accurate explanation, as are all symptoms dependent on nervous agency. They are, however, rendered more intelligible by noting them in connection with the condition of the capillaries of the injured part at the time of their occurrence viz. Spasms. These spasm are under the immediate control of the sympathetic system. In every instance it is natural to conclude that a concomitant state of stimulation exists. Thus the whole system prepare inducing these very general effects. In direct action on the part, reflected action takes the medium of nervous centres. This condition of spasm, fades off. The face soon becomes flushed. The eyes are suffused. The patient complains of headache. There is great mental excitement. The whole nervous system is acutely elevated. Vomiting, as it less of pain pass. Thus the whole body becomes attaining their greatest intensity, just as they reach the great nervous centres. The surface is of a pungent heat, and is raised several.
depresents above the natural standard. The symptoms are altered by their
quantity, quality, and ultimately cease. Thus the fever
abated at first in small quantity and that of a thick, greasy
consistence, to a boil. Next, the thirst is invariable, the tongue
loses its taste, the tongue becomes dry and coated with a rough brown fur. The urine is altered
in quantity, is deepened in colour, or is at times suppressed.
The skin is dry and hard. The patient coughs about the cannot sleep;
and sometimes becomes delirious. His pulse is rapid and thin.
Inconstant. These symptoms constituting the condition known as
Symptomatic Fever or Inflammatory Fever, have been ascribed to different
causes. It is generally believed, that these symptoms depended upon
the absorption of some matter from the part injured. Such a view
is easily rebutted, apart from the acknowledged fact that absorption does
not take place during inflammation, for the constitutional symptoms proceed
by local action implying a change of composition in the injured part. It must
be remembered that the constitutional affection attains its height with no great
rapidity as the local, affording no time for the non-eliminated diseases
to produce a poison. If they can only be supposed to be accumulation
or the only reasonable view we can be entertained that explains the two
constitutional symptoms and their evident local reaction is to refer them
as constitutional irritation dependent on the primary affection. It shall
not be speculative further regarding the subject for the present but
simply indicate that the result of such local irritation is the local symptoms.
I continued still further to have a 2nd Constitutional Excitement, acting on
the part of the 1st. If still continued, general local dejection.
These symptoms of constitutional disordered may continue from a variable length of time, their duration being greatly influenced by the previous condition of the constitution.

C. The symptoms marking the commencement of jaundice do not appear suddenly. We find the symptoms of high nervous vascular excitement gradually merging into those of exhaustion, marked often by mental lassitude, and at a further stage by actual apoplexy. The pulse then rapidly sinks in force and volume; the patient suffers from mental anxiety; he is restless and irritable; his features become sunken and rigid; hisings are observed but are broken by occasional hiccup. He does not complain of pain, but has a feeling of universal incipient stomach; his skin is a little dry and cold and dry breaks out from time to time in a cold clammy perspiration, and at times has an icteric tinge. The tongue and fauces are coated with a thick, greenish excoriating and deliquescence becomes difficult. Some patients are inclined to become drowsy in the sooner fallower than they arise from their sleep. Frequently, they have eyeball stiffness. At times they pick at their bedclothes, and stare vacantly, about, as the following done object in motion. They are annoyed by painful spectral illusions, become delirious, the generally of a low character. There rarely hold accompanied with loud cries of vehement efforts. The pulse becomes small, rapid, quick, fluttering; the colourless is altered, that their mind is scarcely recognizably. The whole skin is of a leaden hue continually covered by a cold clammy perspiration. Throwing from it, they are quite insensible, unable to speak or swallow.
lying sunk in bed; their breathing becomes slow and indistinct, the
expiration is labored; the Pulse gone; the intervals between the
inspirations become longer and longer, and the patient dies without
a struggle.

We have now finished the description of Traumatic Gastric
as a Local <constitutional> disease as it appears to be more ob-
some-oft-propri - Any observations explanatory of these symp-
toms have been of a practices kind.

II Theory of Gastric

I will now, secondly, attempt to investigate as far as possible
the ultimate cause of Gastric following injury.
And naturally, we look at the previous history of such a patient,
and seek for predisposing causes to aid us in our inquiry.
1. Predisposing causes.

Among these may be mentioned: Age, Sex, Climate, Previous.
Physical & Moral Condition & Habits of the Patient.
Yet severe accidents sustained during childhood, the little injuries
in the limbs under the shock, or if he recovers from this, the natural
weakness of his constitution comes thru though the & he can not stand
after the age of puberty, or till he is but he had attained his full growth.
If Imitation be setup, it generally kills him outright-leaving no time for the
local effects to manifest themselves. If Gastric Gastric dots indeed,
there can be but little hope; if the Constitution be mastered his vitality
is so small that he rapidly sinks.
In old age, Traumatic Jaundice proper to time, Demile Jaundice may be.
fall from light abrasions. At this time of life, a lesser accident
early, deaths, and almost no time is given for inflammatory acts.

Became established, if
of the condition of the middle period of life be well speak less.
Mediately, Intui The mean time be may, Remark that the condition
of the finals is in many respects analogous to that of childhood.
The female alike she suffers more severely at the time of the accident
generally speaking, last permanently, deprired
Warm climates have the credit of being particularly obnoxious as
preceding Traumatic Jaundice. This climate is not found happy
in the climate, in those who have become throug, inhabited to each
temperatures. In India, for example, the natives are known to have
injuries the thin self-infected or otherwise, under it. Most Europeans
not think. So much suspect in this as in other instances, Climate
can make to be the omission of producing many evils & might
more justly be ascribed to intemperance or luxury.

In considering the Physical & Moral condition and habits of the
Patient as a predisposing cause, much might be said, and that
to without disposing very far. Intui it is all to obvious what we will
embrace our remarks to two points. 1. The Physical condition of a
patient, that the patient is as producing a condition favorable
to the removal of Jaundice. At, the Physical condition exhibited
by a tendency to Debris, etc., Inflammation. And 2. Certain
physical conditions induced by intemperance &the in eating or
drinking.
The physical condition of a Robust & Plethoric Patient as a predisposing cause of Gairopene.

This certainly at first sight seems very contrary to what one at first expected. Instead of finding those of a weak constitution the victims of Gairopene, it is the strong Man of a robust constitution & plethoric habit, who perhaps more knew what it was to ill, whose frame in every part exhibits a plethoric health, that suffers most.

This condition of body is of course only, but in the pain of life, can plethoric health than when suddenly checked act as a quick disposition cause of weakness?

Weakness is of two kinds: Actual & Relative. The latter only in the weaken. By contrast, and does not point to aberration of Equilibrium between the existing system of the body and the supply of nutrient fluid afforded for its Nourishment & Reproduction, or deficiency of proper power to employ this Nourishment if afforded towards purpose.

Hence it is plain this, and it is hence easy to see that the greater the antecedent Emancipation of function requiring as it does a peripatetic nutrition, so much the greater will be the weakness resulting. When this process is interfused with in any way.

The state of Robust Health as that phrase is commonly understood, I consider to be a stronger state, that is if the nutrient forces are tasted to their utmost, successfully struggle with a surplus of vital stimulus, yielding the body of health by the action at its full stretch of every secreting organ. The subjects of this class are perfectly conscious, running upon the verge of the boundary between health.
and distaste a sudden shock demoralizing some important function.


The Physical condition exhibited by a tendency to suppurative in-


flammation.

Suppurative manifests itself as an acute inflammation confined

to the tonsils or throat and the submaxillary tissues. That


is they in ordinary circumstances, whether when it occurs after


these injuries it attacks the face, inflammation is a mere state


of fever. This inflammation is characterized by a tendency, after


maintaining an active life, by its almost immediate disappearance.


In fact, the always expect analogous serious have described in the


over worked restless constitution; and this is a real existing constitu-


tional condition until once produced by this intercurrent injury and consequent inflammation.


2d. The Physical - Most conditions induced by intemperance, or


the constitutional state of is produced by the use of stimulants;


Within the shape of food or drink of a nature or amount more


than commensurate to the accommodations afforded. There are observed


true the living body into a condition of excited action, and by


its permanent continuance this condition comes to be as it


were natural to the system yet all the while the body is in a


state of fictitious health, as is seen when the stimulants is with-
The stimulus of pain is of importance in the nervous system, producing as a secondary effect a changed condition both of the nervous general system. Thus we have an increased disposition to react, without the power of maintaining such action. In such persons after a comparatively slight wound, we have inflammatory action set up, generally of a diffused character, & disappearing. The injured part remains weakened, & catarrhal changes place slowly. The effect is the same whatever may have been the stimulus, be it the stimulant, the salt liquor (for it is especially to this condition frequently observed in coolers' servants that such remarks apply) or further seems to have some effect in altering the condition of the blood & tissues, rendering the latter more liable to succumb under the effects of any morbid affection. It induces a condition of dilating plethora produces in a given time quantity, better quality of plethora.

3. The exciting causes of Traumatic Gangrene

Inflammation, as stated in Commencing, is the immediate antecedent of Gangrene, and not the result of a certain defect or excitatory cause. But the causes we are to describe are the causes of the inflammation which commences in Gangrene. These may, firstly, be stated to be those Injuries that are not influenced by certain circumstances.

1st. The Force or Power inflicted.
2nd. The Kind of Injury inflicted.
1. The texture of the injured tissue.

The skin and cellular layers may be injured to a considerable extent, and comparatively a slight degree of inflammation is the result. There is here free escape afforded for effusion and evaporation going on. Their fullest extent, with no other than a superficial ulcer. Gangrene ensues in cases where the deeper parts remain untouched. Such for instance as muscles, fasciae, tendons, and especially bone, and more particularly when this is not by fracture but driven into the tissues around opened by a sharp object, opening up the rest of the fracture. Compound dislocations of articulating surfaces, fracture into joints. Especially, injuries to duplicate the deep vessels of a limb.

The tendency of injuries of fibrous structure to terminate in acute inflammation resulting in gangrene is explicable by attending to the character of fibrous texture and the connection will be found. They are in the first place dense, rigid, yielding. They constitute the theatres of the action of Muscles. Lympathic vessels, nerves, and are separated from the tissues by a vascular fine cellular type in non-inflamed parts. Once upset, spread rapidly. The high degree of resistance and inflammation is known to attend the injury of tendons or ligaments. Structure is shown partly to depend upon the close vitality of these tissues themselves (which act very much as foreign bodies when they are attacked by immediately acute inflammation) and partly to the structure arrangement. Bone described 15. All stages in continuity.
Inflammation and confinement of the inflammatory products in muscular tissue to have the inflammatory action excited and kept up by the constant twitching of the injured fibres, and as he had occasion formerly to observe the fibrous sheath presents inflammatory swelling. Factors of bone may remain in their results by the displaced ends producing destruction and irritation in the neighbouring tissues. The confinement of the inflammatory swelling and from the high sympathetic irritation it is found to attend all injuries of this texture. Injuries inflicted on joints are always of a serious nature, because the surface implicated in the diseased action are so extensive for the same bulk of joint. It is good in regard to them if it has been given in speaking of these textures, compound dislocation. Compound dislocation combined with fracture is so much the more serious because the action is more acute as well as more extensive.

When the feeding artery of a limb is injured, its results follow the circulation of the limb beyond is for some little time impaired and further the suddenly increased collateral circulation has a tendency to fill into mechanical congestion and thus to favour retention of inflammatory action in a part already weakened. This inflammatory tendency is of course much increased when the principal artery of a limb is injured at the same time the congestion cannot fail the much increased thus circulation more rapidly cease injury to the tissues of a part affects its vitality and to a certain extent its circulation and the irritation of the system induces...
In their injury in Extreems.

2 The Kind of Injury inflicted

A clean cut is not liable to terminate in Gangrene. A punctured wound, extending deeply, producing laceration of the deeper textures is a more frequent cause. In its inflammatory action result as it almost certainly does the wound is no longer patent. But in the matter escapes among the tissues producing disastrous consequences. It is in this way that visceral abscess is generally formed. But of all the causes in fact the most common are extensive lacerated wounds being producing great disorganization of all the textures of a limb. These are especially met with in gun shot wounds, Machinery, Railway, or Wagon injuries. These usually destroy at the time of the accident the Vitality of some part of the limb, if not the Vitality is so lowered that the parts are unable to support the inflammatory action to ensue.

Some blame of this hemorhage in instruction that bleeding fluids attire serves an exciting cause of Gangrene.

3 The magnitude of the Injury

The extent of injury varies exceedingly, from a mere Valentine wounding. At times it is a deep scratch, or an entire limb may be crushed with laceration of the soft parts and mere coagulation; between these Extreems be have every variety of extent.

These severe Injuries at acts as exciting causes of Gangrene are...
attacked by certain symptoms. These may be divided into
1. The Immediate or the First Effects
2. Secondary or the Late Effects

1st Immediate or Phenomena of Shock

The head is pale and motionless, and lies in any position in which chance may fall. There is no sensibility. Muscular tension is quite gone. The surface feels cold, and it has lost the appearance of a limb.
He suffer from constant thirst. The patient now continue in a state of stupor until the time of his death. In such circumstances himself passes rapidly, the man recovers from it. And an entire or partial reaction takes place. When this latter occurs, severe pain is complained of, the patient is dozing confused, his manner is restless and wandering, and the state of delirium comes on. In this case, with loud cries groans, he is restless and uneasy. He picks at the bed clothes, suffers from headaches and sometimes from general convulsions. The feeling of thirst is gone, and he refuses any fluids. As may be offered him. His features become pinched and ghastly, the surface is often of a slightly yellow hue, the lips rapidly; when this is the termination, the reaction has taken place in the inspired limb, its temperature may have become natural, but there is no inflammatory action present. If the limb has been removed after death, the flaps will be found re-established, their surface sterilized with a thin denier. But the lymphatic opeans is to be seen. Now this condition feels refer to as death, that described as the effect in the constitutional symptoms attending jaundice. These descriptions are not minatory. But taken from actual cases occurred lately in the Hospital. The Railway injury of feet from the different patients, in the one instance partial fracture ensued. In the other amputation to be had recourse to again limbs in the way described. In the other, time was afforded for amputation. The phenomena of death both the same in both cases. May the primary effect of severe injury act as a cause of death.
When home it is removed by fire frequently, an excessive instability
of the walls remaining, it may tend to hasten disastrous consequences
by inducing a further reversion of the moral principles.
disposition to favourable action? we have seen that the core
of the part involved in inflammatory action is most favourable
tissue is weakened. From what has been stated it appears that
thickening the stability, verticle, of the part, is the
effect of the system from 5. The deduction is plain that this
may act as a cause of predisposition.

2. Secondary, effect of local lysis or Part-vibration
If the patient survive the shock and complete reaction take place,
the Lid, formerly, pale and becomes of a bright red tint. Skin
pink is complained of, the parts surrounding the injury become
crushed, inflamed, and the local symptoms be formerly described.
Infection and this in toxicity weakened by the antecedent state
of shock and nervous depression. The action proper continues
and terms to death unless this general depression be removed
and the nervous system regains its ascendency; but there is a
complication of this inflammation, in the effect of long continued
vibration from pain.

Pain is an excess of natural elevation produced by the overestima-
tion of sensitive surfaces, involving a consciousness of this con-
uention. At first, prepared is recovery from ordinary elevation,
or the body of the subject is much weaker than known by the
exhaustion consequent upon elevation. Reduced to its intensity of
continuance. Pain then produces both local and constitutional effects
of the most alarming nature. The local as of the nature of nerve
supply of blood to the part. The constitutional are similar to

These

The effect local & constitutional produced by these two conditions. The primary shock. The secondary, visceral depression are such as to disorder all the functions of the body to a great or slight degree. At times the former is sufficient to produce death, often however it only passes the way for a speedily fatal issue of the latter.

The Pathology of Traumatic Cerebral Disease: an Explanatory of the Production of Symptoms Local & Constitutional described in the first part of this paper from predisposing Exciting Causes as have just been enumerated has been a matter of dispute for a long long period. And then the question, that the decision arrived at determines a point of great practical importance viz. whether surgical interference is justifiable in such cases.

In the other forms of Cerebral Disease acknowledged to depend on constitutional causes, the continuance of the action is a gauge of the state of the Constitution and the unimportunity of the disease of the part. Before the system (which is a benefit of operation) is admitted. That many consider Traumatic Cerebral Disease to be totally distinct with as regards its origin with maintaining cause. According to them the local Cerebral is the immediate result of
of the local injury and the constitutional symptoms are dependent up
on the local Gaumrene.

The direct injury is without doubt the primary cause of all that
follows, because here it is sometimes of itself sufficient to destroy
the vitality of the whole body, it localizes the parts, and by disturbing
the haemacyte, of the nervous system, favours the unrestrained
rise of inflammation, action, or by mechanical obstruction of
circulation, by venous effusion, and blockade of hepatic Gaumrene,
promotes the removal of effete tissue, hastens the decay of blood,
and prevents the occurrence of reparative action. Added to this
is the further effects of inflammation, fever, and concomitant pain
producing first a stimulant effect, indicated by fever, delirium,
rest, a weakening, indicated by increased irritability, marked
by chill, loose stool, hiccup, general weakness, and lastly
great depression the symptoms by which we have been accustomed to
look out for partial reaction and terminated with symptoms indicat-
ing death of Gaumrene.

The opinion that the dead or dying tissue acts as a poison contain-
ing the system may here be considered.

1. We have no proof that such is the case; we do not find that the
constitutional symptoms bear any proportion whatever to the extent
affected by the morbid action. In cases of Gaumrene following
upon ligation of the principal artery of a limb, we have Gaumrene
symptoms produced in all its local phenomena identical with
those of traumatic Gaumrene, differing only in two important fac-

...
That the Constitutional Symptoms are generally dotted frame.

That this form of Gampre is usually, becomes defined.

During inflammation, Acute Absorption is in a state of slumber.
So that it is impossible to believe that it can take place.

When Absorption may occur, be have no such symptoms.

If it be a poison formed before complete death is the mischiefous cause of all these symptoms how is it when a Remission of inflammation seems about to terminate in Gampre, and the loaded matter is again absorbed poisoning of the system does not take place; or again is it the dead matter or the poisonous states in it that the deposition commences to have large fatal Healthy spectators lying in contact with the dead matter. In fact it is not really to clearly that the blood supplies them to act, pushing away, and to depoiting the dead from the living tissues) and no poisoning of the system occurs. The same may be said of the analogous instance of the depoiting of large bodies. In one instance remember a patient with an enormous caruncle on the back 15°. how laid fruit, open. The putrid breath remained for a long time attached to person like process covered by prunculations protruding into its substance and during this time the patient was comparatively well, no poisoning took place at all events he drank rapidity after its removal from the expired discharge from the prunculating surfaces.

There is therefore another analogy to lead us to hold such a doctrine.

It is acknowledged that Traumatic Gampre in healthy persons.

*Notices*
Lynn's Principles of Surgery.
Thus only in cases where the lightning has sustained a direct shock, either from the victim of the lightning, or the importance of the organ injured, and that in these cases, the constitutional symptoms bear a direct proportion to the importance of the part injured and the violence of the action as proceeds the destruction of its vitality, and further that all the cases of Swansea owing upon slight sources to such a powerful predisposing cause, which without further research, let us admit, that a state of great nervous depression is an expected in the production of traumatic Swansea. But further when we consider how the parts injured are directly from the itself of a part from the shock sustained—That the brain becomes itself injured to some extent in its vitality. How a proportionately great reflex action follows upon this weakened condition, and this destroying the natural nutrition of both part of the system being a wonder when inflammation has dissipated the injured brain, or Render vitally immanent on the whole body. That treat death the first scene and that the system the spectacle, danger. The further predisposing cause of constitutional debility, attack the certainty of Swansea, coming is only increased.

Traumatic Swansea then seems to depend upon a condition of combined local and constitutional breakers, and is therefore not Pathological, but logically distinct from other forms of Swansea, denominated Constitutional. It differs however in the breakers being cutaneous, induced and consequently the shock action being all the more rapid. The local extension of Swansea cannot be confined to the absorption of
is produced by the preparation of inflammation.

If what I have stated be correct, then Traumatic Gout would not be a local but a constitutional condition. The question of embolism arising its proper term. Very simple. If the constitutional symptoms are those of depression, the check of the operation cannot fail to look the constitutional state later. By deductions can be drawn from cases of this after such interference without Gout being again set up in the stumps. This is real, what one we expect in the attempt at Inflammation, action is made and to be cannot have Gout. Cases however have recovered after embolism. These are very few in number and in all probability these very cases if left to themselves is to have taken the initiative by forming a natural embolism itself. In the end, perhaps as with the Surgeon's knife but with a larger prospect of ultimate recovery.

Patrick Hen. Watson.

March 31st, 1853.